Minutes of the Federal Open Market Committee January 25–26, 2011

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, January 25, 2011, at 1:00 p.m. and continued on Wednesday, January 26, 2011, at 9:00 a.m.

PRESENT:

Ben Bernanke, Chairman William C. Dudley, Vice Chairman Elizabeth Duke Charles L. Evans Richard W. Fisher Narayana Kocherlakota Charles I. Plosser Sarah Bloom Raskin Daniel K. Tarullo Kevin Warsh Janet L. Yellen

- Jeffrey M. Lacker, Dennis P. Lockhart, John F. Moore, and Sandra Pianalto, Alternate Members of the Federal Open Market Committee
- James Bullard, Thomas M. Hoenig, and Eric Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English, Secretary and Economist Deborah J. Danker, Deputy Secretary Matthew M. Luecke, Assistant Secretary David W. Skidmore, Assistant Secretary Michelle A. Smith, Assistant Secretary Scott G. Alvarez, General Counsel Thomas C. Baxter, Deputy General Counsel Nathan Sheets, Economist David J. Stockton, Economist

- James A. Clouse, Thomas A. Connors, Steven B. Kamin, Loretta J. Mester, Simon Potter, David Reifschneider, Harvey Rosenblum, Daniel G. Sullivan, David W. Wilcox, and Kei-Mu Yi, Associate Economists
- Brian Sack, Manager, System Open Market Account

- Patrick M. Parkinson, Director, Division of Banking Supervision and Regulation, Board of Governors
- Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors
- William Nelson, Deputy Director, Division of Monetary Affairs, Board of Governors
- Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors
- Charles S. Struckmeyer,¹ Deputy Staff Director, Office of the Staff Director, Board of Gover-
- Lawrence Slifman and William Wascher, Senior Associate Directors, Division of Research and Statistics, Board of Governors
- Andrew T. Levin, Senior Adviser, Office of Board Members, Board of Governors
- Joyce K. Zickler, Visiting Senior Adviser, Division of Monetary Affairs, Board of Governors
- Daniel M. Covitz, Associate Director, Division of Research and Statistics, Board of Governors
- Gretchen C. Weinbach, Deputy Associate Director, Division of Monetary Affairs, Board of Governors
- Beth Anne Wilson,² Assistant Director, Division of International Finance, Board of Governors
- Bruce Fallick,² Group Manager, Division of Research and Statistics, Board of Governors
- David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors

¹ Attended Wednesday's session only.

² Attended Tuesday's session only.

David M. Arseneau, Senior Economist, Division of International Finance, Board of Governors; Stefania D'Amico and Edward M. Nelson, Senior Economists, Division of Monetary Affairs, Board of Governors; Norman J. Morin, Senior Economist, Division of Research and Statistics, Board of Governors

Mark A. Carlson, Economist, Division of Monetary Affairs, Board of Governors

Randall A. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors

Patrick K. Barron, First Vice President, Federal Reserve Bank of Atlanta

Mark S. Sniderman, Executive Vice President, Federal Reserve Bank of Cleveland

David Altig, Alan D. Barkema, Glenn D. Rudebusch, Geoffrey Tootell, and Christopher J. Waller, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Kansas City, San Francisco, Boston, and St. Louis, respectively

Julie Ann Remache, Assistant Vice President, Federal Reserve Bank of New York

Ayşegül Şahin,² Officer, Federal Reserve Bank of New York

R. Jason Faberman² and Robert L. Hetzel, Senior Economists, Federal Reserve Banks of Philadelphia and Richmond, respectively

Annual Organizational Matters

In the agenda for this meeting, it was reported that advices of the election of the following members and alternate members of the Federal Open Market Committee for a term beginning January 25, 2011, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

William C. Dudley, President of the Federal Reserve Bank of New York, with Christine Cumming, First Vice President of the Federal Reserve Bank of New York, as alternate.

Charles I. Plosser, President of the Federal Reserve Bank of Philadelphia, with Jeffrey M. Lacker, President of the Federal Reserve Bank of Richmond, as alternate.

Charles L. Evans, President of the Federal Reserve Bank of Chicago, with Sandra Pianalto, President of the Federal Reserve Bank of Cleveland, as alternate.

Richard W. Fisher, President of the Federal Reserve Bank of Dallas, with Dennis P. Lockhart, President of the Federal Reserve Bank of Atlanta, as alternate.

Narayana Kocherlakota, President of the Federal Reserve Bank of Minneapolis, with John F. Moore, First Vice President of the Federal Reserve Bank of San Francisco, as alternate.

By unanimous vote, the following officers of the Federal Open Market Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2012:

Ben Bernanke William C. Dudley William B. English

Deborah J. Danker Matthew M. Luecke David W. Skidmore Michelle A. Smith Scott G. Alvarez Thomas Baxter

Richard M. Ashton

Nathan Sheets David J. Stockton

James A. Clouse Thomas A. Connors Steven B. Kamin Loretta J. Mester Simon Potter David Reifschneider Harvey Rosenblum Daniel G. Sullivan David W. Wilcox Chairman
Vice Chairman
Secretary and
Economist
Deputy Secretary
Assistant Secretary
Assistant Secretary
Assistant Secretary
General Counsel
Deputy General
Counsel
Assistant General
Counsel
Economist

Economist

² Attended Tuesday's session only.

Kei-Mu Yi

Associate Economists

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account.

By unanimous vote, Brian Sack was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

Secretary's note: Advice subsequently was received that the selection of Mr. Sack as Manager was satisfactory to the Board of Directors of the Federal Reserve Bank of New York.

By unanimous vote, the Committee adopted its Program for Security of FOMC Information with amendments to the section on ongoing responsibility for maintaining confidentiality and with a number of technical updates.

By unanimous vote, the Authorization for Domestic Open Market Operations was reaffirmed in the form shown below. The Guidelines for the Conduct of System Open Market Operations in Federal-Agency Issues remained suspended.

AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS (Reaffirmed January 25, 2011)

- 1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:
 - A. To buy or sell U.S. government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. government and federal agency securities

- with the Treasury or the individual agencies or to allow them to mature without replacement; and
- B. To buy or sell in the open market U.S. government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the System Open Market Account under agreements to resell or repurchase such securities or obligations (including such transactions as are commonly referred to as repo and reverse repo transactions) in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual counterparties.
- 2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to use agents in agency MBS-related transactions.
- In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. government securities and securities that are direct obligations of any agency of the United States, held in the System Open Market Account, to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids that could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.
- 4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York:
 - A. For the System Open Market Account, to sell U.S. government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, to such accounts on the bases set forth in paragraph 1.A under agreements providing for the resale by such accounts of those securities in 65 business days or

less on terms comparable to those available on such transactions in the market; and

B. For the New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph l.B, repurchase agreements in U.S. government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, and to arrange corresponding sale and repurchase agreements between its own account and such foreign, international, and fiscal agency accounts maintained at the Bank.

Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate and to take actions that result in material changes in the composition and size of the assets in the System Open Market Account other than those anticipated by the Committee at its most recent meeting. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

By unanimous vote, the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations were reaffirmed in the form shown below. The vote to reaffirm these documents included approval of the System's warehousing agreement with the U.S. Treasury.

AUTHORIZATION FOR FOREIGN CURRENCY OPERATIONS

(Reaffirmed January 25, 2011)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for the System Open Market Account, to the extent necessary to carry out the Committee's foreign currency di-

rective and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Australian dollars
Brazilian reais
Canadian dollars
Danish kroner
euro
Japanese yen
Korean won
Mexican pesos
New Zealand dollars
Norwegian kroner
Pounds sterling
Singapore dollars
Swedish kronor
Swiss francs

- B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.
- C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.
- D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank Amount of arrangement (millions of dollars equivalent)

Bank of Canada 2,000 Bank of Mexico 3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

- 3. All transactions in foreign currencies undertaken under paragraph 1.A above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at nonmarket exchange rates.
- 4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under section 214.5 of Regulation N shall be referred for review and approval to the Committee.
- 5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for re-

- purchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.
- All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, the Vice Chairman's alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to the Manager's responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.
- 7. The Chairman is authorized:
 - A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;
 - B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;
 - C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.
- 8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.
- 9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to For-

eign Relationships of Federal Reserve Banks dated January 1, 1944.

FOREIGN CURRENCY DIRECTIVE (Reaffirmed January 25, 2011)

- 1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.
- 2. To achieve this end the System shall:
- A. Undertake spot and forward purchases and sales of foreign exchange.
- B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.
- C. Cooperate in other respects with central banks of other countries and with international monetary institutions.
- 3. Transactions may also be undertaken:
 - A. To adjust System balances in light of probable future needs for currencies.
 - B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.
 - C. For such other purposes as may be expressly authorized by the Committee.
- 4. System foreign currency operations shall be conducted:
 - A. In close and continuous consultation and cooperation with the United States Treasury;
 - B. In cooperation, as appropriate, with foreign monetary authorities; and
 - C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

PROCEDURAL INSTRUCTIONS WITH RESPECT TO FOREIGN CURRENCY OPERATIONS (Reaffirmed January 25, 2011)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings

- with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee, unless otherwise directed by the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.
- 1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):
 - A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$300 million on any day or \$600 million since the most recent regular meeting of the Committee.
 - B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding \$150 million, or \$300 million when the operation is associated with repayment of swap drawings.
 - C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.
 - D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.
- 2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):
 - A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$1.5 billion since the most recent regular meeting of the Committee.
 - B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.
- 3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

Developments in Financial Markets and the Federal Reserve's Balance Sheet

The Manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets during the period since the Federal Open Market Committee (FOMC) met on De-

cember 14, 2010. He also reported on System open market operations, including the continuing reinvestment into longer-term Treasury securities of principal payments received on the SOMA's holdings of agency debt and agency-guaranteed mortgage-backed securities (MBS) as well as the ongoing purchases of additional Treasury securities authorized at the November 2-3, 2010, FOMC meeting. Since the first purchase schedule was released after the November FOMC meeting, the Open Market Desk at the Federal Reserve Bank of New York purchased a total of \$236 billion of Treasury securities. These purchases included \$69 billion associated with the reinvestment of principal payments on agency debt and MBS and \$167 billion associated with the expansion of the Federal Reserve's securities holdings. The maturity distribution of the Desk's purchases resulted in an average duration of about 51/2 years for the securities obtained. The Manager reported that given the purchases completed thus far, achieving a \$600 billion expansion of the SOMA portfolio by the end of June 2011 would require purchasing the additional securities at a pace of about \$80 billion per month. In addition, the Manager provided projections of the Federal Reserve's balance sheet and income under alternative assumptions. There were no open market operations in foreign currencies for the System's account over the intermeeting period. By unanimous vote, the Committee ratified the Desk's transactions over the intermeeting period.

Structural Unemployment

A staff presentation on structural unemployment summarized a broad range of economic research on the topic conducted across the Federal Reserve System. Among the factors cited that could affect the level of structural unemployment were demographics, changes in the intensity of job search and worker screening, differences in the geographic locations of potential workers and vacant jobs, and mismatches in characteristics between potential workers and available jobs. Most of the research reviewed suggested that structural unemployment had likely risen in recent years, but by less than actual unemployment had increased.

In discussing the staff presentation, meeting participants mentioned various factors that were seen as influencing the path of the unemployment rate. Several participants noted that estimates of the contributions of the individual factors depended importantly on the approach taken by researchers, including the models used and the assumptions made. Participants noted that many of the factors that contributed to the recent apparent rise in structural unemployment were likely to

recede over time. Some participants stressed that certain determinants of the unemployment rate, such as mismatches in the labor market and firms' hiring practices, were both difficult to measure in real time and not directly affected by monetary policy. Others emphasized that in the current situation, monetary policy could still play an important role in reducing unemployment.

Staff Review of the Economic Situation

The information reviewed at the January 25-26 meeting indicated that the economic recovery was firming, though the expansion had not yet been sufficient to bring about a significant improvement in labor market conditions. Consumer spending rose strongly late last year, and the ongoing expansion in business outlays for equipment and software appeared to have been sustained in recent months. However, construction activity in both the residential and nonresidential sectors remained weak. Industrial production increased solidly in November and December. Modest gains in employment continued, and the unemployment rate remained elevated. Despite further increases in commodity prices, measures of underlying inflation remained subdued and longer-run inflation expectations were stable.

The labor market situation continued to improve gradually. Private nonfarm payroll employment increased in December at a pace roughly the same as its average for 2010 as a whole, and the average workweek for all employees was unchanged. Services industries continued to add most of the new jobs in the private sector. Initial claims for unemployment insurance trended lower in December and early January, and some indicators of job openings and firms' hiring plans improved. The unemployment rate decreased to 9.4 percent in December, but this decline in part reflected a further drop in the labor force participation rate. Long-duration unemployment remained elevated, and the employment-to-population ratio was still at a very low level at the end of the year.

Total industrial production posted solid increases in November and December, in part because colder weather boosted the output of utilities. Although motor vehicle assemblies dropped back in those months, production in the manufacturing sector outside of motor vehicles posted solid gains that were fairly widespread across industries; as a result, capacity utilization in manufacturing increased further, although it remained below its long-run average. Most indicators of near-term industrial activity, such as the new orders

diffusion indexes in the national and regional manufacturing surveys, were at levels consistent with further increases in industrial production in the near term; in addition, motor vehicle production was scheduled to move up again in early 2011.

Growth in consumer spending appeared to have picked up in the fourth quarter from the more modest pace seen earlier in the year. Nominal retail sales, excluding purchases of motor vehicles and parts, rose again in December, following substantial increases in the previous four months. In addition, sales of new light motor vehicles climbed further in December after stepping up to a higher level during the preceding two months. The available data suggested that consumer spending was supported by gains in personal income in the fourth quarter of 2010. Moreover, household net worth appeared to have risen in the fourth quarter, as the large increase in equity prices more than offset further declines in house values. Consumer credit started to increase again in October and November after having generally declined since the fall of 2008. However, consumer sentiment only edged up, on net, in December and early January, and it was still at a relatively subdued level.

Activity in the housing market remained weak in an environment characterized by soft demand, a large inventory of foreclosed or distressed properties on the market, and tight credit conditions for construction loans and mortgages. Starts and permits for new single-family homes in November and December were still near the very low levels recorded since midyear. Sales of new homes rose in December but remained historically low. Sales of existing homes increased in November and December from the more depressed levels seen during the summer and early autumn, but these sales stayed relatively weak as well. Moreover, measures of house prices declined further in recent months, and survey responses indicated that households remained concerned that home values might continue to fall.

Real business investment in equipment and software appeared to have increased further in the fourth quarter, although likely at a more moderate rate than in the first three quarters of 2010. After declining in October, nominal orders and shipments of nondefense capital goods excluding aircraft rose in November, and the level of new orders remained above the level of shipments, indicating that the backlog of unfilled orders was still rising. Available indicators suggested that business purchases of software stayed on a solid up-

trend, and outlays for computing and communications equipment appeared to have risen briskly. However, business spending for transportation equipment, including aircraft and motor vehicles, likely declined in the fourth quarter of 2010 after expanding rapidly earlier in the year. Surveys of purchasing managers reported that firms planned to increase their capital spending this year. Reports on planned capital expenditures by small businesses showed some signs of improvement in recent months, although they remained relatively subdued. Business outlays for nonresidential structures stayed weak, reflecting high vacancy rates and low property values for office and commercial properties, as well as tight credit conditions for commercial real estate. In contrast, investment in drilling and mining structures increased, buoyed by rising energy prices.

Real nonfarm inventory investment appeared to have slowed substantially in the fourth quarter after a sizable increase in the previous quarter. Much of the fourth-quarter downswing was likely associated with a draw-down of motor vehicle stocks after an accumulation in the third quarter. Book-value data for October and November suggested that the pace of inventory accumulation also was slowing outside of the motor vehicle sector. Inventory-to-sales ratios toward the end of 2010 were close to their pre-recession norms, and most purchasing managers surveyed in December reported that their customers' inventories were not too high.

Measures of underlying consumer price inflation remained low. In December, the core consumer price index (CPI) edged up, as goods prices were unchanged and prices of non-energy services rose slightly. The 12-month change in the core CPI remained near the very low readings of the previous two months. Other measures of underlying inflation, such as the trimmedmean and median CPIs, also remained subdued. Despite the steep run-up in agricultural commodity prices over the second half of last year, increases in retail food prices remained modest. However, consumer energy prices moved up sharply in December, and prices of most types of crude oil increased during December and into January. The prices of nonfuel industrial commodities also continued to rise over the intermeeting period. In December and early January, survey measures of households' long-term inflation expectations stayed in the range that has prevailed for some time.

Available measures of labor compensation showed that labor cost pressures were still restrained, as wage increases slowed along with inflation and productivity gains appeared to remain substantial. The 12-month change in average hourly earnings for all employees continued to be low in December.

The U.S. international trade deficit narrowed slightly in November, as both nominal exports and imports moved up by almost the same amount. The increase in exports was driven by agricultural goods, in part reflecting higher prices, as well as by consumer goods. In contrast, exports of machinery and automotive products fell, reversing their October gains. The rise in imports reflected an increase in the value of imported petroleum products, mostly explained by higher prices, and of capital goods, which was supported importantly by a jump in computers. At the same time, noticeable decreases were registered for imports of automotive products, services, and consumer goods, which were primarily due to pharmaceuticals. These developments, combined with the substantial narrowing in the trade deficit in October, implied that the trade deficit likely shrank considerably in the fourth quarter of 2010.

Recent indicators of foreign economic activity suggested that the global recovery was strengthening. Much of this strength was centered in the emerging market economies (EMEs), where widespread increases in exports and in manufacturing purchasing managers indexes (PMIs) pointed to a resurgence in economic growth following a slowdown in the third quarter of 2010. For China and Singapore, real gross domestic product (GDP) data for the fourth quarter confirmed a rebound in economic growth. In contrast, the rise in economic activity in the advanced foreign economies (AFEs) remained at a subdued pace. In the euro area, the incoming economic data were mixed: Industrial production, manufacturing PMIs, and industrial confidence firmed, but retail sales and consumer confidence softened. The data also pointed to an uneven expansion across the euro area, suggesting that economic growth in Germany continued to outpace that in the euro-area periphery. In Japan, exports and household spending were soft, although industrial production firmed. Foreign inflation picked up noticeably in the fourth quarter of 2010, mostly because of an acceleration of energy and food prices. Measures of core inflation remained much more subdued, although they also moved up in some countries. In the EMEs, concerns about inflation prompted a number of central banks to tighten policy. Some EMEs reportedly took steps to limit the appreciation of their currencies by intervening in foreign exchange markets, and some acted to discourage capital inflows.

Staff Review of the Financial Situation

The decision by the FOMC at its December meeting to maintain the 0 to 1/4 percent target range for the federal funds rate was widely anticipated. Both the accompanying statement and the minutes of the meeting were broadly in line with market expectations and elicited limited price action in financial markets. Yields on medium- and longer-term nominal Treasury securities increased slightly, on net, over the intermeeting period. Yields rose in response to data releases that generally pointed to some firming of the economic recovery, but the upward pressure on yields apparently was tempered by expectations of only a gradual pace of improvement in the labor market, the belief that the Federal Reserve was likely to maintain an accommodative policy stance, and ongoing concerns about fiscal and banking pressures in the euro area. Futures quotes indicated that the expected path for the federal funds rate did not change appreciably over the intermeeting period. Market-based measures of uncertainty about longer-term Treasury yields, which had risen ahead of year-end, declined on balance, likely in part reflecting solidifying market expectations regarding the ultimate size of the FOMC's asset purchase program. The purchases of longer-term Treasury securities by the Desk during the intermeeting period reportedly had no significant effects on measures of day-to-day Treasury market functioning.

Inflation compensation over the next 5 years based on Treasury inflation-protected securities (TIPS) moved up, likely pushed higher by rising prices for oil and other commodities and by the firming of the economic outlook. Further out, TIPS-based inflation compensation 5 to 10 years ahead edged down slightly on net. Yields on investment-grade corporate bonds were little changed over the intermeeting period, while those on speculative-grade corporate bonds declined a little, leaving both investment- and speculative-grade spreads over yields on comparable-maturity Treasury securities somewhat narrower. In the secondary market for leveraged loans, the average bid price moved up further over the intermeeting period. The municipal bond market appeared to continue to price in an atypically high level of default risk. The ratios of yields on longterm general obligation bonds to those on comparablematurity Treasury securities moved up to a very high level. Despite these strains, gross issuance of long-term municipal bonds remained strong in December.

Conditions in short-term funding markets remained stable over the intermeeting period. Spreads of dollar London interbank offered rates, or Libor, over overnight index swap rates held fairly steady across the term structure, as the year-end passed without incident. Some modest year-end pressures were observed in repurchase agreement markets, but they dissipated by early January. On net, spreads on unsecured nonfinancial commercial paper remained low, and spreads on asset-backed commercial paper appeared to have stabilized after having been somewhat volatile across year-end. Anecdotal reports suggested that the modestly rising trend in the use of dealer-intermediated leverage evident in 2010 had continued into 2011, but information from a variety of sources indicated that leverage remained well below the levels reached before the crisis.

Broad U.S. stock price indexes rose, on net, over the intermeeting period, extending their recent strong performance; bank stock prices modestly outperformed the broader market. The increase in equity prices reflected the apparent firming of the economic recovery and favorable early reports on fourth-quarter corporate earnings. Option-implied volatility on the S&P 500 index remained at a relatively low level. The spread between the staff's estimate of the expected real equity return for S&P 500 firms and the real 10-year Treasury yield—a rough measure of the equity risk premium—narrowed further over the period but remained elevated relative to longer-run norms.

Overall, net debt financing by U.S. nonfinancial corporations was robust in the fourth quarter of 2010. Net issuance of bonds was particularly strong, supported by heavy issuance in both the speculative- and investment-grade sectors. Meanwhile, nonfinancial commercial paper outstanding decreased slightly over the quarter. Issuance of syndicated leveraged loans, especially those funded by institutional investors, stayed strong. Measures of the credit quality of nonfinancial corporations continued to improve. Gross public equity issuance by nonfinancial firms dropped back in December to its average pace in 2010.

Financing conditions for most types of commercial real estate remained tight over the intermeeting period, and delinquency rates for broad categories of commercial real estate loans stayed elevated. However, for larger nonresidential properties in strong markets, credit appeared to have become somewhat less restricted, and prices moved up, on net, from their lows at the beginning of 2010; at the same time, prices of other nonresidential properties continued to trend down. Issuance of commercial mortgage-backed securities increased in

the fourth quarter of 2010 but was still only a fraction of its pre-crisis level.

Rates on conforming fixed-rate residential mortgages edged down a bit during the intermeeting period after having risen appreciably in November and early December, leaving their spreads over the 10-year Treasury yield down slightly. Refinancing activity, which had fallen in response to the increase in mortgage rates in November, remained at a low level during the period. Outstanding residential mortgage debt declined further in the third quarter of 2010, reflecting weak housing activity and tight lending standards. Serious delinquency rates on prime and subprime mortgages flattened out in October and November after having moved down earlier in the year. Signs of improvement were evident in the consumer credit market, where issuance of consumer asset-backed securities was strong early in the fourth quarter. In addition, delinquency rates on consumer loans continued to trend down toward their longer-run norms.

Banks made a sizable reduction in their holdings of securities in December. Core loans on banks' books the sum of commercial and industrial (C&I), real estate, and consumer loans-edged down again, but the rate of contraction appeared to be abating. C&I loans expanded at a robust pace in December. Despite continued weakness in many residential real estate indicators, closed-end residential mortgage loans held by large banks rose noticeably for the fifth consecutive month in December. By contrast, commercial real estate loans, home equity loans, and consumer loans decreased during that month. The behavior of the components of core loans in recent months was broadly consistent with the results of the Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in January. The survey responses indicated that, during the fourth quarter of 2010, modest net fractions of banks continued to ease standards for C&I loans and that larger net fractions eased some terms on such loans. Changes in banks' lending policies for other categories of loans were reportedly mixed and generally small. Meanwhile, moderate net fractions of respondents indicated that demand for C&I loans had strengthened over the preceding three months, and that inquiries from business borrowers for new or increased credit lines had picked up. In contrast, demand reportedly weakened somewhat, on balance, for residential real estate loans and was little changed for consumer loans. Respondents indicated that the recent increase in their holdings of closed-end residential mortgage loans reflected the relative attractiveness of such loans

compared with other assets and, for some, a desire to expand their balance sheets by adding to this loan category.

In December, M2 expanded at a rate a bit below its pace in November. Liquid deposits, the largest component of M2, continued to increase rapidly, while the contraction in small time deposits and retail money market mutual funds persisted. The ongoing compositional shift within M2 toward liquid deposits likely reflected the relatively high yields on liquid deposits compared with yields on many other components of M2. Currency growth slowed in December, due in part to weather-related transportation difficulties that delayed flows of U.S. bank notes to international destinations.

The broad nominal index of the U.S. dollar declined more than 1 percent over the intermeeting period, depreciating by roughly similar amounts, on average, against the currencies of the AFEs and the EMEs. The dollar's decline appeared to reflect a variety of factors: signs of stronger economic activity abroad, particularly in the EMEs; actual and prospective monetary policy tightening in foreign economies; and increases in the prices of oil and other commodities, which lent support to the currencies of commodity-exporting countries. Benchmark 10-year sovereign yields moved higher in the core euro-area economies and the United Kingdom but were little changed in Japan and Canada. Equity prices increased in the AFEs and in many EMEs as market participants appeared to revise upward their outlook for the global economy.

Financial market strains in the euro area continued during the intermeeting period. Greek, Irish, and Portuguese sovereign debt spreads over German bunds rose in December and early January as credit rating agencies downgraded the sovereign debt of Ireland and Portugal. Subsequently, though, spreads narrowed following some relatively successful sovereign debt auctions by countries in the euro-area periphery, evidence of stepped-up purchases of peripheral sovereign bonds by the European Central Bank (ECB), and reports that the European Union was considering expanding the backstop capacity of the European Financial Stability Facility. Some modest dollar funding pressures developed as year-end approached, but they did not persist into January. To continue to support liquidity conditions in global money markets, on December 21, the Federal Reserve announced an extension through August 1, 2011, of its swap line arrangements with the ECB and the central banks of Japan, Canada, Switzerland, and the United Kingdom. In addition, the Bank of England established a temporary liquidity swap facility with the ECB designed to provide Ireland's central bank with sterling to help meet the potential needs of the Irish banking system.

Staff Economic Outlook

Because the incoming data on production and spending were stronger, on balance, than the staff's expectations at the time of the December FOMC meeting, the nearterm forecast for the increase in real GDP was revised up. However, the staff's outlook for the pace of economic growth over the medium term was adjusted only slightly relative to the projection prepared for the December meeting. Compared with the December forecast, the conditioning assumptions underlying the forecast were little changed and roughly offsetting: Although higher equity prices and a lower foreign exchange value of the dollar were expected to be slightly more supportive of economic growth, the staff anticipated that these influences would be about offset by lower house prices and higher oil prices. In addition, the staff's assumptions about fiscal policy changed little—the fiscal package enacted in December was close to what the staff had already incorporated in their previous projection. In the medium term, the recovery in economic activity was expected to receive support from accommodative monetary policy, further improvements in financial conditions, and greater household and business confidence. Over the projection period, the rise in real GDP was expected to be sufficient to slowly reduce the rate of unemployment, but the jobless rate was anticipated to remain elevated at the end of 2012.

The underlying rate of consumer price inflation in recent months was in line with what the staff anticipated at the time of the December meeting, and the staff continued to project that increases in core PCE prices would remain subdued in 2011 and 2012. As in previous projections, the persistent wide margin of economic slack in the forecast was expected to maintain downward pressure on inflation, but this influence was anticipated to be counterbalanced by the continued stability of inflation expectations and by increases in the prices of imported goods. The staff anticipated that brisk increases in energy prices would raise total consumer price inflation above core inflation this year, but that upward pressure from energy prices would wane by next year.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, all meeting participants—the six members of the Board of Governors and the presidents of the 12 Federal Reserve Banks—provided projections of output growth, the unemployment rate, and inflation for each year from 2011 through 2013 and over the longer run. Longerrun projections represent each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks. Participants' forecasts are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In the discussion of intermeeting developments and their implications for the outlook, the participants generally expressed greater confidence that the economic recovery would be sustained and would gradually strengthen over coming quarters. Their more positive assessment reflected both the tenor of the incoming economic data and information received from business contacts since the previous meeting. Spending by households picked up noticeably in the fourth quarter, business outlays continued to grow at a moderate pace, and conditions in labor and financial markets improved somewhat over the intermeeting period. business contacts remained somewhat cautious about the economic outlook, they generally indicated greater optimism regarding their own prospects for sales and hiring than at the time of the previous meeting. While participants viewed the downside risks to their forecasts of economic activity over the projection period as having diminished, their assessment of the most likely outcomes for economic activity and inflation over the projection period was not greatly changed. Most participants raised their forecast of real GDP growth in 2011 somewhat and continued to anticipate stronger growth this year than in 2010, with a further gradual acceleration during 2012 and 2013. The unemployment rate was still projected to decline gradually over the forecast period but to remain elevated. Total inflation was still expected to remain subdued, and core inflation was projected to trend up slowly over the next few years as economic activity picks up but inflation expectations remain well anchored.

Participants' judgment that the economic recovery was on a firmer footing was supported by the strength in household spending in the fourth quarter. The incoming data indicated that households stepped up sharply their purchases of durable goods, particularly automobiles, last quarter. Spending on luxury goods also increased, and the pace of holiday sales was better than in recent years. However, some participants noted that it was not clear whether the recent pace of consumer spending would be sustained. On the one hand, the additional spending could reflect pent-up demand following the downturn or greater confidence on the part of households about the future, in which case it might be expected to continue. On the other hand, the additional spending could prove short lived given that a good portion of it appeared to have occurred in relatively volatile categories such as autos.

Activity in the business sector also indicated that the economic recovery remained on track. For instance, indicators of business investment in equipment and software continued to rise. Industrial production posted solid gains, supported in part by U.S. exports that appeared to have been noticeably stronger in the fourth quarter. A wide range of business contacts expressed cautious optimism about the durability and strength of the recovery, and some were planning for an expansion in production in order to meet an anticipated rise in sales. In addition, although residential construction spending remained weak, spending on commercial construction projects showed some tentative signs of bottoming out.

Participants noted that conditions in labor markets continued to improve gradually. Payroll employment increased at a modest pace, and, although the data had been somewhat erratic, a slight downward trend was apparent in the recent pattern of weekly initial claims for unemployment insurance. In addition, some surveys of employers suggested a somewhat more upbeat outlook for employment. Business contacts provided a range of information regarding hiring intentions, with some indicating that workers at all skill levels were readily obtainable, while others reported that they had upgraded skill requirements and that some of the currently unemployed did not meet those new requirements. Some businesses remained reluctant to add permanent positions and were planning to meet their labor requirements with temporary workers. Overall, meeting participants continued to express disappointment in both the pace and the unevenness of the improvements in labor markets and noted that they would monitor labor market developments closely.

Conditions in financial markets improved somewhat further over the intermeeting period. Broad equity prices rose, adding to their substantial gains since the middle of 2010. Yields on longer-term nominal Treasury securities were little changed, on balance, over the period, but they had increased quite a bit in recent months, leaving the Treasury yield curve noticeably steeper. Some participants noted that a steep yield curve is a typical feature of an economy in recovery, and that much of the steepening appeared to have occurred in response to stronger-than-expected economic data. Market-based measures of inflation compensation over the next few years increased further over the intermeeting period, extending the rise that occurred over recent months. Some participants suggested that the increase likely reflected, in part, a decline in investors' perceptions of the near-term risk of further disinflation. At the same time, longer-term inflation expectations had remained stable. Credit spreads on the debt of nonfinancial corporations continued to narrow over the period, reaching levels noticeably lower than those posted several months ago, with the largest declines coming on speculative-grade bonds. However, credit conditions remained tight for smaller, bank-dependent firms, although bank loan growth had clearly picked up in some sectors. Some participants noted that, taken together, these financial developments were consistent with a more accommodative stance of monetary policy since last summer or a reduction in risk aversion on the part of market participants.

Meeting participants noted that headline inflation had been boosted by higher prices for energy and other commodities, as well as by increases in the prices of imported goods. Some participants indicated that while unit labor costs generally had declined and profit margins were wide, the higher commodity prices were boosting costs of production for many firms. Some business contacts indicated that they were going to try to pass a portion of these higher costs through to their customers but were uncertain about whether that would be possible given current market conditions. Many participants expected that, with significant slack in resource markets and longer-term inflation expectations stable, measures of core inflation would remain close to current levels in coming quarters. However, the importance of resource slack as a factor influencing inflation was debated, and some participants suggested that other variables, such as current and expected rates of economic growth, could be useful indicators of inflation pressures.

Overall, most participants indicated that the somewhat better-than-expected economic data and anecdotal information from business contacts had importantly increased their confidence in the continuation of a moderate recovery in activity this year. Accordingly, participants generally agreed that the downside risks to their forecasts of both economic growth and inflation—as well as the odds of a period of deflation-had diminished. Participants also generally agreed that the recent data had not led them to significantly change their outlooks for the most likely rates of economic growth and inflation in coming quarters. Participants noted that some of the strength in the recent data reflected factors that could prove temporary, such as the large contribution from net exports, a volatile category, and the sharp step-up in auto sales. Most participants continued to anticipate that the recovery in economic activity was likely to be restrained by a variety of economic factors, including still-high unemployment, modest income growth, lower housing wealth, high rates of mortgage foreclosure, elevated inventories of unsold homes, and tight credit conditions in a number of sectors. In addition, although many business contacts expressed more optimism about the economic recovery, a number had aimed their recent investments primarily at enhancing productivity rather than expanding employment, and hiring for some businesses reportedly was Some participants focused on temporary workers. noted that incoming data on production, spending, and employment would need to be solid for a while longer to justify a significant upward revision to their outlook for the likely pace of the recovery.

Participants generally saw the risks to their outlook for economic growth and employment as having become broadly balanced, but they continued to see significant risks to both sides of the outlook. On the downside, participants remained worried about the possible effects of spillovers from the banking and fiscal strains in peripheral Europe, the ongoing fiscal adjustments by U.S. state and local governments, and the continued weakness in the housing market. On the upside, the recent strength in household spending raised the possibility that domestic final demand could snap back more rapidly than anticipated. If so, a considerably stronger recovery could take hold, more in line with the sorts of recoveries seen following deep economic recessions in the past.

Regarding risks to the inflation outlook, some participants noted that increases in energy and other commodity prices as well as in the prices of imported goods from EMEs posed upside risks. Others, however, noted that the pass-through from increases in commodity prices to broad measures of consumer price inflation in the United States had generally been fairly small. Some participants expressed concern that in a situation in which businesses had been unable to raise

prices in response to higher costs for some time, firms might increase them substantially once they found themselves with sufficient pricing power. In any case, the factors affecting the ability of businesses to pass through higher prices to consumers were viewed as complex and hard to monitor in real time. Most participants saw the large degree of resource slack in the economy as likely to remain a force restraining inflation, and while the risk of further disinflation had declined, a number of participants cited concerns that inflation was below its mandate-consistent level and was expected to remain so for some time. Finally, some participants noted that if the very large size of the Federal Reserve's balance sheet led the public to doubt the Committee's ability to withdraw monetary accommodation when doing so becomes appropriate, the result could be upward pressure on inflation expectations and so on actual inflation. To mitigate such risks, it was noted that the Committee should continue its planning for the eventual exit from the current exceptionally accommodative stance of policy.

Committee Policy Action

In their discussion of monetary policy for the period ahead, members agreed that no changes to the Committee's asset purchase program or to its target range for the federal funds rate were warranted at this meet-While the information received over the intermeeting period increased members' confidence in the sustainability of the economic recovery, the pace of the recovery was insufficient to bring about a significant improvement in labor market conditions, and measures of underlying inflation had trended downward. Moreover, the economic projections submitted for this meeting indicated that unemployment was expected to remain above, and inflation to remain somewhat below, levels consistent with the Committee's objectives for some time. Accordingly, the Committee agreed to continue to expand its holdings of longer-term Treasury securities as announced in November in order to promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with the Committee's mandate. The Committee decided to maintain its existing policy of reinvesting principal payments from its securities holdings and reaffirmed its intention to purchase \$600 billion of longerterm Treasury securities by the end of the second quarter of 2011. A few members remained unsure of the likely effects of the asset purchase program on the economy, but felt that making changes to the program at this time was not appropriate. Members emphasized that the Committee would continue to regularly review

the pace of its securities purchases and the overall size of the asset purchase program in light of incoming information—including information on the outlook for economic activity, developments in financial markets, and the efficacy of the purchase program and any unintended consequences that might arise—and would adjust the program as needed to best foster maximum employment and price stability. A few members noted that additional data pointing to a sufficiently strong recovery could make it appropriate to consider reducing the pace or overall size of the purchase program. However, others pointed out that it was unlikely that the outlook would change by enough to substantiate any adjustments to the program before its completion. In addition, the Committee reiterated its expectation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate for an extended period. With respect to the statement to be released following the meeting, members agreed that only small changes were necessary to reflect the improvement in the near-term economic outlook and to make clear that the policy decision reflected a continuation of the asset purchase program announced in November.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$2.6 trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longerterm Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

"Information received since the Federal Open Market Committee met in December confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring about a significant improvement in labor market conditions. Growth in household spending picked up late last year, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, while investment in nonresidential structures is still weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. Although commodity prices have risen, longer-term inflation expectations have remained stable, and measures of underlying inflation have been trending downward.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, progress toward its objectives has been disappointingly slow.

To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and intends to purchase \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust

the program as needed to best foster maximum employment and price stability.

The Committee will maintain the target range for the federal funds rate at 0 to ½ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.

The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate."

Voting for this action: Ben Bernanke, William C. Dudley, Elizabeth Duke, Charles L. Evans, Richard W. Fisher, Narayana Kocherlakota, Charles I. Plosser, Sarah Bloom Raskin, Daniel K. Tarullo, Kevin Warsh, and Janet L. Yellen.

Voting against this action: None.

Next, the Committee turned to a discussion of its external communications, specifically the importance of communicating both broadly and effectively. FOMC participants noted the importance of fair and equal access by the public to information that could be informative about future policy decisions, and they considered approaches to address this issue. Several participants noted that increased clarity of communications was a key objective, and some referred to the central role of communications in the monetary policy transmission process. A focus of the discussion was on how to encourage dialogue with the public in an appropriate and transparent manner. The subcommittee on communications agreed to consider whether further guidance in this area would be useful.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 15, 2011. The meeting adjourned at 2:40 p.m. on January 26, 2011.

Notation Vote

By notation vote completed on January 3, 2011, the Committee unanimously approved the minutes of the FOMC meeting held on December 14, 2010.

William B. English Secretary

Summary of Economic Projections

In conjunction with the January 25-26, 2011, Federal Open Market Committee (FOMC) meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, submitted projections for growth of real output, the unemployment rate, and inflation for the years 2011 to 2013 and over the longer run. The projections were based on information available through the end of the meeting and on each participant's assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks.

As depicted in figure 1, FOMC participants' projections for the next three years indicated that they expect a sustained recovery in real economic activity, marked by a step-up in the rate of increase in real gross domestic product (GDP) in 2011 followed by further modest acceleration in 2012 and 2013. They anticipated that, over this period, the pace of the recovery would exceed

their estimates of the longer-run sustainable rate of increase in real GDP by enough to gradually lower the unemployment rate. However, by the end of 2013, participants projected that the unemployment rate would still exceed their estimates of the longer-run unemployment rate. Most participants expected that inflation would likely move up somewhat over the forecast period but would remain at rates below those they see as consistent, over the longer run, with the Committee's dual mandate of maximum employment and price stability.

As indicated in table 1, relative to their previous projections in November 2010, participants anticipated somewhat more rapid growth in real GDP this year, but they did not significantly alter their expectations for the pace of the expansion in 2012 and 2013 or for the longer run. Participants made only minor changes to their forecasts for the path of the unemployment rate and for the rate of inflation over the next three years. Although most participants anticipated that the economy would likely converge to sustainable rates of increase in real GDP and prices over five or six years, a number of participants indicated that they expected that the convergence of the unemployment rate to its longer-run level would require additional time.

As they did in November, participants judged the level of uncertainty associated with their projections for real economic activity and inflation as unusually high rela-

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, January 2011 Percent

| Variable | Central tendency ¹ | | | | Range ² | | | |
|--|-------------------------------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------------------|------------|
| | 2011 | 2012 | 2013 | Longer run | 2011 | 2012 | 2013 | Longer run |
| Change in real GDP November projection | 3.4 to 3.9 | 3.5 to 4.4 | 3.7 to 4.6 | 2.5 to 2.8 | 3.2 to 4.2 | 3.4 to 4.5 | 3.0 to 5.0 | 2.4 to 3.0 |
| | 3.0 to 3.6 | 3.6 to 4.5 | 3.5 to 4.6 | 2.5 to 2.8 | 2.5 to 4.0 | 2.6 to 4.7 | 3.0 to 5.0 | 2.4 to 3.0 |
| Unemployment rate November projection | 8.8 to 9.0 | 7.6 to 8.1 | 6.8 to 7.2 | 5.0 to 6.0 | 8.4 to 9.0 | 7.2 to 8.4 | 6.0 to 7.9 | 5.0 to 6.2 |
| | 8.9 to 9.1 | 7.7 to 8.2 | 6.9 to 7.4 | 5.0 to 6.0 | 8.2 to 9.3 | 7.0 to 8.7 | 5.9 to 7.9 | 5.0 to 6.3 |
| PCE inflation | 1.3 to 1.7 | 1.0 to 1.9 | 1.2 to 2.0 | 1.6 to 2.0 | 1.0 to 2.0 | 0.7 to 2.2 | 0.6 to 2.0 | 1.5 to 2.0 |
| | 1.1 to 1.7 | 1.1 to 1.8 | 1.2 to 2.0 | 1.6 to 2.0 | 0.9 to 2.2 | 0.6 to 2.2 | 0.4 to 2.0 | 1.5 to 2.0 |
| Core PCE inflation ³ November projection. | 1.0 to 1.3 0.9 to 1.6 | 1.0 to 1.5 1.0 to 1.6 | 1.2 to 2.0 1.1 to 2.0 | | 0.7 to 1.8 0.7 to 2.0 | 0.6 to 2.0 0.6 to 2.0 | 0.6 to 2.0 0.5 to 2.0 | |

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 2–3, 2010.

- 1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
- 2. The range for a variable in a given year consists of all participants' projections, from lowest to highest, for that variable in that year.
- 3. Longer-run projections for core PCE inflation are not collected.

Percent Change in real GDP Central tendency of projections Range of projections Actual Longer run Percent Unemployment rate — 10 __ 5 Longer run Percent PCE inflation — 3 Longer run Percent Core PCE inflation — 3 - 1

Figure 1. Central tendencies and ranges of economic projections, 2011–13 and over the longer run

Note: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual. The data for the change in real GDP, PCE inflation, and core PCE inflation shown for 2010 incorporate the advance estimate of GDP for the fourth quarter of 2010, which the Bureau of Economic Analysis released on January 28, 2011. This information was not available to FOMC meeting participants at the time of their meeting.

tive to historical norms. Most continued to see the risks surrounding their forecasts of GDP growth, the unemployment rate, and inflation over the next three years to be generally balanced. However, fewer noted downside risks to the likely pace of the expansion and, accordingly, upside risks to the unemployment rate than in November; fewer also saw downside risks to inflation.

The Outlook

The central tendency of participants' forecasts for the change in real GDP in 2011 was 3.4 to 3.9 percent, somewhat higher than in the November projections. Participants stated that the economic information received since November indicated that consumer spending, business investment, and net exports increased more strongly at the end of 2010 than expected earlier; industrial production also expanded more rapidly than they previously anticipated. In addition, after the November projections were prepared, the Congress approved fiscal stimulus measures that were expected to provide further impetus to household and business spending in 2011. Moreover, participants noted that financial conditions had improved since November, including a rise in equity prices, a pickup in activity in capital markets, reports of easing of credit conditions in some markets, and an upturn in bank lending in some sectors. Many participants viewed the stronger tenor of the recent information, along with the additional fiscal stimulus, as suggesting that the recovery had gained some strength—a development seen as likely to carry into 2011—and that the expansion was on firmer footing. Participants expected that the expansion in real economic activity this year would continue to be supported by accommodative monetary policy and by ongoing improvement in credit and financial market conditions. The strengthening in private demand was anticipated to be led by increases in consumer and business spending; over time, improvements in household and business confidence and in labor market conditions would likely reinforce the rise in domestic demand. Nonetheless, participants recognized that the information available since November also indicated that the expansion remained uneven across sectors of the economy, and they expected that the pace of economic activity would continue to be moderated by the weakness in residential and nonresidential construction, the still relatively tight credit conditions in some sectors, an ongoing desire by households to repair their balance sheets, business caution about hiring, and the budget difficulties faced by state and local governments.

Participants expected that the economic expansion would strengthen further in 2012 and 2013, with the central tendencies of their projections for the growth in real GDP moving up to 3.5 to 4.4 percent in 2012 and then to 3.7 to 4.6 percent in 2013. Participants cited, as among the likely contributors to a sustained pickup in the pace of the expansion, a continued improvement in financial market conditions, further expansion of credit availability to households and businesses, increasing household and business confidence, and a favorable outlook for U.S. exports. Several participants noted that, in such an environment, and with labor market conditions anticipated to improve gradually, the restraints on household spending from past declines in wealth and the desire to rebuild savings should abate. A number of participants saw such conditions fostering a broader and stronger recovery in business investment, with a few noting that the market for commercial real estate had recently shown signs of stabilizing. Nonetheless, participants saw a number of factors that would likely continue to moderate the pace of the expansion. Most participants expected that the recovery in the housing market would remain slow, restrained by the overhang of vacant properties, prospects for weak house prices, and the difficulties in resolving foreclosures. In addition, some participants expected that the fiscal strains on the budgets of state and local governments would damp their spending for a time and that the federal government sector would likely be a drag on economic activity after 2011.

Participants anticipated that a gradual but steady reduction in the unemployment rate would accompany the pickup in the pace of the economic expansion over the next three years. The central tendency of their forecasts for the unemployment rate at the end of 2011 was 8.8 to 9.0 percent—a decline of less than 1 percentage point from the actual rate in the fourth quarter of 2010. Although participants generally expected further declines in the unemployment rate over the subsequent two years—to a central tendency of 6.8 to 7.2 percent at the end of 2013—they anticipated that, at the end of that period, unemployment would remain noticeably higher than their estimates of the longer-run rate. Many participants thought that, with appropriate monetary policy and in the absence of further shocks, the unemployment rate would continue to converge gradually toward its longer-run rate within five to six years, but a number of participants indicated that the convergence process would likely be more extended.

While participants viewed the projected pace of the expansion in economic activity as the principal factor

underlying their forecasts for the path of the unemployment rate, they also indicated that their projections were influenced by a number of other factors that were likely to contribute to a relatively gradual recovery in the labor market. In that regard, several participants noted that dislocations associated with the uneven recovery across sectors of the economy might retard the matching of workers and jobs. In addition, a number of participants viewed the modest pace of hiring in 2010 as, in part, the result of business caution about the durability of the recovery and of employers' efforts to achieve additional increases in productivity; several participants also cited the particularly slow recovery in demand experienced by small businesses as a factor restraining new job creation. With demand expected to strengthen across a range of businesses and with business confidence expected to improve, participants anticipated that hiring would pick up over the forecast period.

Participants continued to expect that inflation would be relatively subdued over the next three years and kept their longer-run projections of inflation unchanged. Many participants indicated that the persistence of large margins of slack in resource utilization should contribute to relatively low rates of inflation over the forecast horizon. In addition, participants noted that appropriate monetary policy, combined with stable longer-run inflation expectations, should help keep inflation in check. The central tendency of their projections for overall personal consumption expenditures (PCE) inflation in 2011 was 1.3 to 1.7 percent, while the central tendency of their forecasts for core PCE inflation was lower—1.0 to 1.3 percent. Increases in the prices of energy and other commodities, which were very rapid in 2010, were anticipated to continue to push headline PCE inflation above the core rate this year. The central tendency of participants' forecasts for inflation in 2012 and 2013 widened somewhat relative to 2011 and showed that inflation was expected to drift up modestly. In 2013, the central tendency of forecasts for both the total and core inflation rates was 1.2 to 2.0 percent. For most participants, inflation in 2013 was not expected to have converged to the longer-run rate of inflation that they individually considered most consistent with the Federal Reserve's dual mandate for maximum employment and stable prices. However, a number of participants anticipated that inflation would reach its longer-run rate within the next three years.

Table 2. Average historical projection error ranges Percentage points

| Variable | 2011 | 2012 | 2013 |
|------------------------------------|------|------|------|
| Change in real GDP1 | ±1.3 | ±1.7 | ±1.8 |
| Unemployment rate ¹ | ±0.7 | ±1.3 | ±1.5 |
| Total consumer prices ² | ±1.0 | ±1.0 | ±1.1 |

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1990 through 2009 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

- 1. For definitions, refer to general note in table 1.
- 2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

Uncertainty and Risks

Most participants continued to share the view that their projections for economic activity and inflation were subject to a higher level of uncertainty than was the norm during the previous 20 years.\(^1\) They identified a number of uncertainties that compounded the inherent difficulties in forecasting output growth, unemployment, and inflation. Among them were uncertainties about the nature of economic recoveries from recessions associated with financial crises, the effects of unconventional monetary policies, the persistence of structural dislocations in the labor market, the future course of federal fiscal policy, and the global economic outlook.

Almost all participants viewed the risks to their forecasts for the strength of the recovery in real GDP as broadly balanced. By contrast, in November, the distribution of views had been somewhat skewed to the downside. In weighing the risks to the projected growth rate of real economic activity, some participants noted the upside risk that the recent strengthening of aggregate spending might mark the beginning of a more normal cyclical rebound in economic activity in which consumer spending might be spurred by pent-up

¹ Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1990 to 2009. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

demand for household durables and in which business investment might be accelerated by the desire to rebuild stocks of fixed capital. A more-rapid-thanexpected easing of credit availability was also seen as a factor that might boost the pickup in private demand. As to the downside risks, many participants pointed to the recent declines in house prices and the potential for a slower resolution of existing problems in mortgage and real estate markets as factors that could have moreadverse-than-expected consequences for household spending and bank balance sheets. In addition, several participants expressed concerns that, in an environment of only gradual improvement in labor market and credit conditions, households might be unusually focused on reducing debt and boosting saving. A number of participants also saw a downside risk in the possibility that the fiscal problems of some state and local governments might lead to a greater retrenchment in their spending than currently anticipated. Finally, several participants expressed concerns that the financial and fiscal strains in the euro area might spill over to U.S. financial markets.

The risks surrounding participants' forecasts of the unemployment rate were also broadly balanced and generally reflected the risks attending participants' views of the likely strength of the expansion in real activity. However, a number of participants noted that the unemployment rate might decline less than they projected if businesses were to remain hesitant to expand their workforces because of uncertainty about the durability of the expansion or about employment costs or if mismatches of workers and jobs were more persistent than anticipated.

Most participants judged the risks to their inflation outlook over the period from 2011 to 2013 to be broadly balanced as well. Compared with their views in November, several participants no longer saw the risks as tilted to the downside, and an additional participant viewed the risks as weighted to the upside. In assessing the risks, a number of participants indicated that they saw the risks of deflation or further unwanted disinflation to have diminished. Many participants identified the persistent gap between their projected unemployment rate and its longer-run rate as a risk that inflation could be lower than they projected. A few of those who indicated that inflation risks were skewed to the upside expressed concerns that the expansion of the

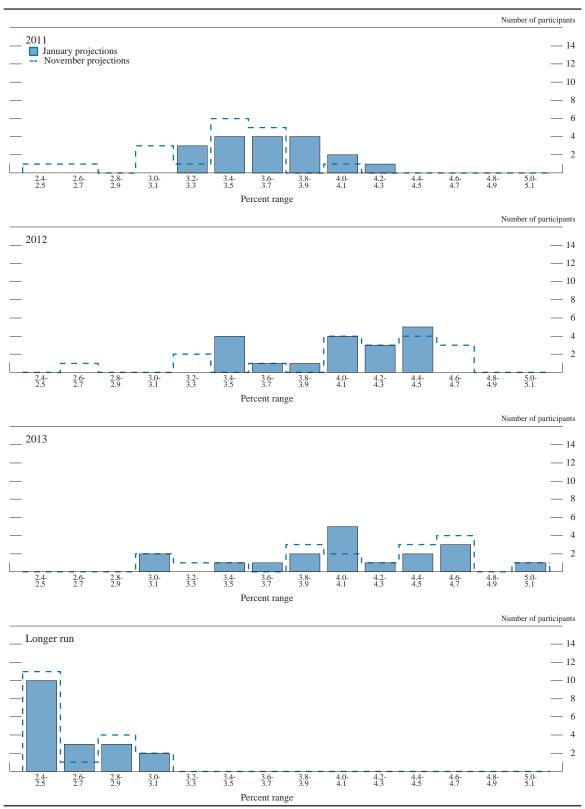
Federal Reserve's balance sheet, if left in place for too long, might erode the stability of longer-run inflation expectations. Alternatively, several participants noted that upside risks to inflation could arise from persistently rapid increases in the costs of energy and other commodities.

Diversity of Views

Figures 2.A and 2.B detail the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate in 2011, 2012, 2013, and over the longer run. The dispersion in these projections reflected differences in participants' assessments of many factors, including the likely evolution of conditions in credit and financial markets, the timing and the degree to which various sectors of the economy and the labor market will recover from the dislocations associated with the deep recession, the outlook for economic and financial developments abroad, and appropriate future monetary policy and its effects on economic activity. For 2011 and 2012, the dispersions of participants' forecasts for the strength in the expansion of real GDP and for the unemployment rate were somewhat narrower than they were last November, while the ranges of views for 2013 and for the longer run were little changed.

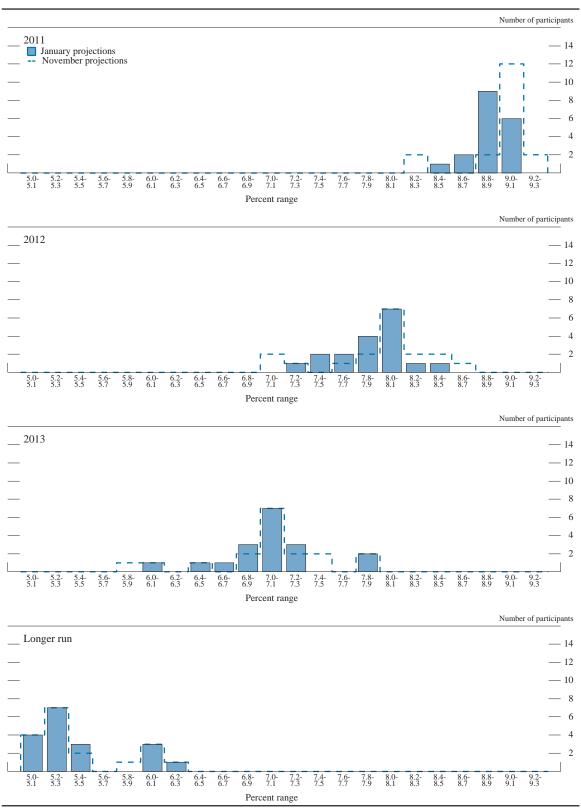
Figures 2.C and 2.D provide the corresponding information about the diversity of participants' views regarding the outlook for total and core PCE inflation. These distributions were somewhat more tightly concentrated for 2011, but for 2012 and 2013, they were much the same as they were in November. In general, the dispersion in the participants' inflation forecasts for the next three years represented differences in judgments regarding the fundamental determinants of inflation, including estimates of the degree of resource slack and the extent to which such slack influences inflation outcomes and expectations as well as estimates of how the stance of monetary policy may influence inflation expectations. Although the distributions of participants' inflation forecasts for 2011 through 2013 continued to be relatively wide, the distribution of projections of the longer-run rate of overall inflation remained tightly concentrated. The narrow range illustrates the broad similarity in participants' assessments of the approximate level of inflation that is consistent with the Federal Reserve's dual objectives of maximum employment and price stability.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2011-13 and over the longer run



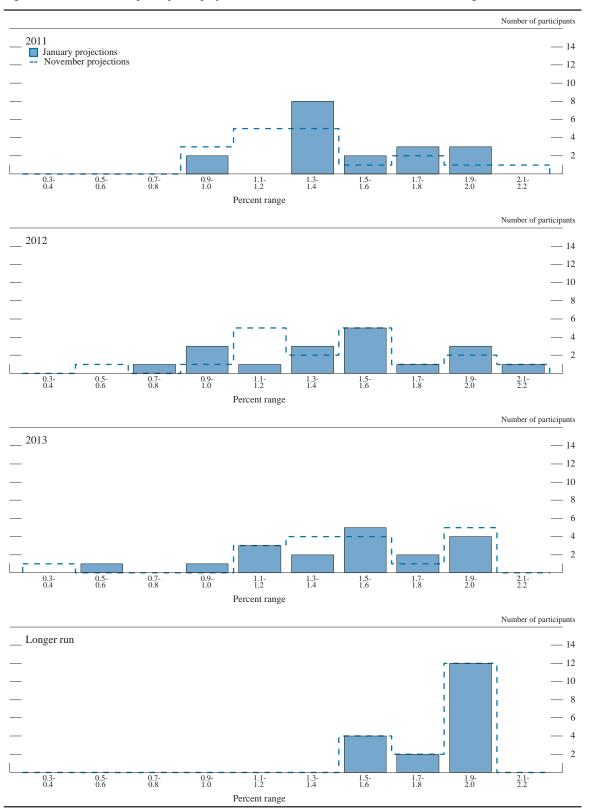
Note: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2011–13 and over the longer run



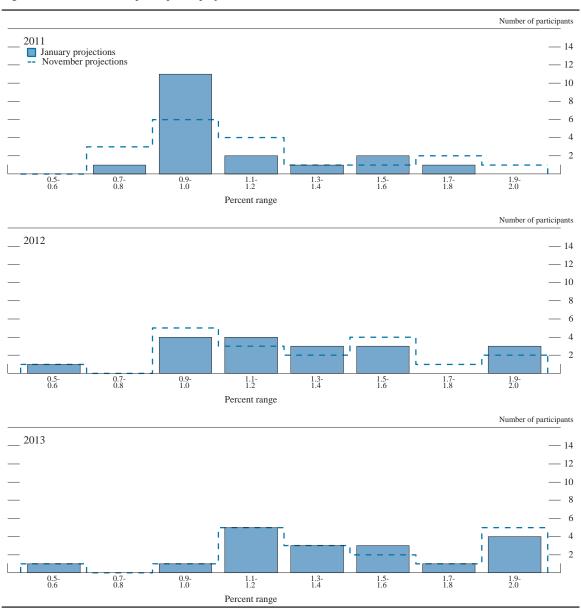
Note: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2011–13 and over the longer run



Note: Definitions of variables are in the general note to table 1.

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2011–13



Note: Definitions of variables are in the general note to table 1.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world. And the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that

experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.7 to 4.3 percent in the current year, 1.3 to 4.7 percent in the second year, and 1.2 to 4.8 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.0 to 3.0 percent in the current and second years, and 0.9 to 3.1 percent in the third year.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.